

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/572,935

Applicant(s)

HAMBITZER ET AL.

Examiner

ADAM A. ARCIERO

Art Unit

1727

—The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

THE REPLY FILED **10 November 2010** FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) The period for reply expires 6 months from the mailing date of the final rejection.
- b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 - (a) They raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) They raise the issue of new matter (see NOTE below);
 - (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. Applicant's reply has overcome the following rejection(s): _____.
6. Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. For purposes of appeal, the proposed amendment(s): a) will not be entered, or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 1-3, 9, 30-34 and 37-48.
Claim(s) withdrawn from consideration: 10-16, 20-29 and 49.

AFFIDAVIT OR OTHER EVIDENCE

8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fail to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____.
13. Other: See Attached Interview Summary.

/Dah-Wei D. Yuan/
Supervisory Patent Examiner, Art Unit 1727

/Adam A Arciero/
Examiner, Art Unit 1727

Continuation of 3. NOTE: Newly amended claim 19 contains new subject matter that would require further consideration and search.

Continuation of 11. does NOT place the application in condition for allowance because: Response to Arguments Applicant's arguments filed November 10, 2010 have been fully considered and are not found to be persuasive.

Applicant's principal arguments are:

- a) Examiner agreed to remove the restriction of claim 49 because of the reasons stated in the arguments (claim 49).
- b) Claim 19 has been amended to further clarify the subject matter to overcome the 35 U.S.C. 112, first paragraph rejections (claim 19).
 - c) The claimed invention is structurally different from the battery cell of Hambitzer et al. because the porous insulator layer of claim 1 is different from a separator due to the size of the pores (claim 1).
 - d) The claimed invention is structurally different from the battery cell of Hambitzer et al. because the porous insulator layer of claim 1 is different from the battery of Hambitzer et al. because the recited structure of "porous insulator layer" does not include a separator, which is present in the battery of Hambitzer et al. (claim 1).
 - e) The claimed invention is structurally different from the battery cell of Hambitzer et al. because the porous insulator layer of claim 1 is different from the battery of Hambitzer et al. because the recited structure of "porous insulator layer" does not include a separator, which is present in the battery of Hambitzer et al. and therefore, the battery of Hambitzer et al. does not inherently allow the active mass to travel from the anode to the cathode thereby causing locally-limited short circuit reactions (claim 1).
 - f) Hambitzer et al. does not disclose "an intermediate space" (claim 1).
 - g) Hambitzer does not disclose the pore shapes and it is further non-obvious to have the claimed pore shapes (claims 7 and 8).
 - h) Hambitzer and Gaveling do not teach, suggest or disclose wherein the electrodes are free of hydroxide ions (claim 19).

In response to Applicant's arguments, please consider the following comments.

a) The Examiner did not agree to remove the restriction of claim 49. Claim 49 was added after the first Office action and was found to be a distinct species from the originally filed claims. Claim 49 recites the limitation "an insulator means for" which invokes 112, 6th paragraph with means plus function language. The specification discloses that the insulating means can be a self-supporting film or a particulate structured material such as oxides (paragraph [0038]). Therefore claim 49 is a distinct species from the originally filed claims.

b) The proposed amendment for claim 19 would overcome the 35 U.S.C. 112, first paragraph rejection when entered.

c) In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., pore size) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

d) Claim 1 using the language "comprising" which is open ended, and does not exclude anything, specifically a separator. The porous insulator layer containing a salt structure of Hambitzer et al. reads on the "porous insulator layer" of claim 1. The term "porous insulator layer" is a broad term which also does not have a specific definition in the art. Office personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d, 1320, 1322 (Fed. Cir. 1989).

e) The Examiner respectfully disagrees. The battery disclosed by Hambitzer et al. is the same as that of the invention of claim 1. The battery of Hambitzer et al. does not require a separator, as Hambitzer et al. states "a separator layer can be applied directly to this foamlke substrate" (col. 7, lines 1-2). The recitation of "can" does not require a separator, but merely states that it is an option to be used in conjunction with the rest of the battery. Furthermore, the "porous insulator layer" of Hambitzer et al. is made of ceramic oxides (col. 5, lines 25-32) which is the same material as that disclosed in the instant disclosure. Furthermore, Examples 1 and 2, for example to not specify the use of a separator. Therefore, the structure of Hambitzer et al. and the present application are the same. It is the position of the Examiner that such properties are inherent, given that the materials and structure disclosed by Hambitzer et al. and the present application are the same. A reference which is silent about a claimed invention's features is inherently anticipatory if the missing feature is necessarily present in that which is described in the reference. Inherency is not established by probabilities or possibilities. *In re Robertson*, 49 USPQ2d 1949 (1999). Applicant is advised to submit other information with respect to the Hambitzer et al. porous insulator layer, if it is shown to be patentably distinct from the instant invention.

f) Hambitzer et al. does disclose an intermediate space, (the space between the electrodes). The term "intermediate spacer" is a broad term which also does not have a specific definition in the art. Office personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d, 1320, 1322 (Fed. Cir. 1989).

g) Hambitzer teaches the same insulator layer as the present application comprising a pore structure to allow active mass to move therethrough (col. 5, lines 25-40). Hambitzer teaches it would be obvious to change the formation of the pore structure and the courts have also held changes of shape and size to be obvious. The claimed pore shapes are common pore shapes found within porous structures made of particles or fibers. The present specification does not provide any basis for forming the specific pore shapes that would lead one of ordinary skill in the art to the novelty of the different pore shapes. Applicant must provide unexpected results to show that the claimed pore shapes are not obvious and superior over the prior art.

h) Hambitzer et al. discloses the same structure of battery as the present disclosure and Gavelin is aimed at solving a similar problem (passivation layers) for achieving similar results (improved battery performance). Applicant's disclosure does not provide adequate "unexpected results". The results displayed in Figs. 5-8 are only from a limited number of samples which are not enough to show consistency in the results. Furthermore, the results are not commensurate with the scope of the prior arts. Furthermore, Hambitzer et al. discloses that the positive electrode does not have to be LiCoO₂ and that it can be carbon or a metal halide and wherein the negative electrode can be sodium, calcium or zinc (col. 1, lines 15-22). Applicant's disclosure states that mainly electrodes comprising LiCoO₂ (paragraph [0047]). Therefore, Hambitzer et al. also discloses electrodes (those not containing LiCoO₂) which are free of hydroxide ions.